Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In re

WTVJ-DT, Miami, FL) FCC File No.

PETITION FOR RULEMAKING TO AMEND THE DTV TABLE OF ALLOTMENTS

NBC Stations Management, Inc., ("NBC"), licensee of WTVJ (TV), Miami, Florida, pursuant to Section 73.622(a) of the Commission's Rules, hereby petitions the FCC to initiate a rulemaking to amend the DTV Table of Allotments in Section 73.622(b) of the Rules to substitute DTV Channel 31 for DTV Channel 30 in Miami, Florida. As set forth in greater detail in the attached Engineering Statement, the proposed substitution will permit NBC to employ a site for WTVJ-DT closer to the center of the urbanized areas within the Miami DMA and will be more spectrally efficient. The requested change to the DTV Table of Allotments can be made in full conformance with the FCC Rules, will permit NBC to provide improved DTV over-the-air service within its market, and will reduce overall interference to other NTSC and DTV stations.

Due to allocation constraints, WTVJ's NTSC operation on Channel 6 is forced to be located approximately 50 kilometers southwest of the antenna sites for the majority of the other television stations servicing Miami, and away from the market's population

center. This has placed WTVJ at a competitive disadvantage and has required the station to utilize two television translator stations to improve the quality of its signal in the heavily populated areas of the market.[1]

NBC wants to correct this competitive deficiency by locating WTVJ-DT at the existing WFOR-TV transmitter site. NBC has obtained reasonable assurance from CBS, the parent of the licensee of WFOR-TV, that the tower is available for WTVJ-DT use. However, the current channel 30 DTV allotment for WTVJ has an allocation restriction preventing the use of DTV channel 30 at the WFOR-TV transmitter site. Accordingly, NBC requests that the DTV Table of Allotments be amended to reflect the substitution of DTV channel 31 for the existing DTV channel 30 allotment at Miami.[2] NBC further requests that the same reference ERP, HAAT and geographic reference coordinates specified for the current DTV channel 30 allotment be employed for the DTV channel 31 allotments.

As demonstrated by the attached Engineering Statement, the requested change can be made in full conformance with the FCC Rules. The requested substitution is clearly in

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[1] With the exception of television stations WEYS and WWFD, which serve geographically remote Key West, only WTVJ and WPXM are significantly removed from the center of the urbanized areas.

[2] We are aware that Paxson Communications Corporation, licensee of WPXM, in its *Reply to Post-Newsweek's Opposition to Petition for Reconsideration* in MM Docket 87-267, requested substitution of DTV channel 31 for DTV channel 26 at Miami. NBC agrees with Post-Newsweek's contention that Paxson's request is procedurally improper and that such a change may only be made through a petition for rulemaking to amend the DTV Table of Allotments. In any event, preliminary studies conducted by NBC suggest that

the public interest as it will reduce predicted interference to more than 90,000 persons, and will allow WTVJ to operate more efficiently, without employing translators.

Accordingly, NBC respectfully requests the Commission to initiate a rulemaking proceeding to amend the DTV Table of Allotments in Section 73.622(b) of the FCC Rules by substituting channel 31 for channel 30 in Miami, Florida.

Respectfully submitted,

NBC STATIONS MANAGEMENT, INC.

By Diane Zipursky

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Washington, D.C. 20004
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August 7, 1998

WPXM-DT could be accommodated on channel 40 at the same reference site requested by Paxson.

DENNY & ASSOCIATES, P.C.
CONSULTING ENGINEERS
WASHINGTON, D.C.

ENGINEERING EXHIBIT
IN SUPPORT OF A PETITION FOR RULE MAKING TO MODIFY THE DTV TABLE OF ALLOTMENTS STATION WTVJ-DT MIAMI, FLORIDA NBC STATIONS MANAGEMENT, INC.

ENGINEERING STATEMENT

INTRODUCTION

The Engineering Exhibit, of which this statement is part, has been prepared on behalf of NBC Stations Management, Inc. (herein NBC), licensee of television station WTVJ, Miami, Florida in support of a petition for rule making to amend the DTV Table of Allotments in Section 73.622(b) of the Federal Communications Commission (FCC) Rules. NBC proposes substitution of DTV channel 31 for DTV channel 30 at Miami, Florida. The substitution will permit NBC to employ a site for WTVJ-DT closer to the center of the urbanized areas within the Miami, Florida, Designated Market Area (DMA). The requested change to the DTV Table of Allotments can be made in full conformance with the FCC Rules and the proposed DTV channel change will permit NBC to provide improved DTV over-the-air service within the Miami, Florida, DMA.

BACKGROUND

WTVJ(TV) is licensed for operation on channel 6 with a maximum peak visual effective radiated power (ERP) of 100 kilowatts (kW), circularly polarized, and antenna radiation center height above average terrain (HAAT) of 549 meters. Allocation constraints restrict the location of the WTVJ transmitter site to a location approximately 50 kilometers southwest of the majority of other television stations serving the Miami, Florida, DMA. Figure 1 of this Engineering Exhibit is a portion of the United States Geological Survey (USGS) 1:750,000 scale Florida state map showing the locations of all television stations within the Miami, Florida, DMA and their relationship to the urbanized areas therein. With the exception of WEYS and WWFD, which serve geographically remote Key West, Florida, only WTVJ and WPXM are significantly removed from the center of the urbanized areas.[1]

[1] The licensee of WPXM, Paxson Communications Corporation (Paxson), pursuant to a *Reply to Post-Newsweek's Opposition to the Petition for Partial Reconsideration of Paxson Communications Corporation* in FCC Mass Media Docket 87-267, requested substitution of DTV channel 31 for DTV channel 26 at Miami, Florida. Preliminary studies suggest that the WPXM DTV operation could be accommodated on channel 40 at the reference site requested by Paxson.

The existing WTVJ channel 6 operation suffers competitively as a result of its site restriction. To compensate, NBC has employed two translator stations, W19BJ, Sunrise, Florida, and W58BU, Hallandale, Florida, to enhance the WTVJ presence within the Miami, Florida, DMA. The use of multiple stations providing the same programming within the same market does not present a spectrally efficient solution to the problem.

In any television market, it is evident that high signal strength levels are required in the most densely populated areas to capture over-the-air viewers and compete effectively. To achieve these high signal strength levels, stations generally locate very close to the population centers of their markets as have most of the stations within the Miami, Florida, DMA. The importance of signal strength, particularly as it pertains to DTV service, was made evident in the *Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order* (MO&O) in FCC Mass Media Docket 87-268. In the MO&O, the FCC adopted specific rules aimed at alleviating the disparities between DTV stations, and provided means for stations to increase power through beam-tilting techniques or application of the *de minimis* interference standard.

NBC wants to correct their competitive deficiency within the Miami, Florida, DMA by locating WTVJ-DT at the existing WFOR-TV transmitter site. NBC has obtained reasonable assurance from CBS, the corporation controlling WFOR-TV, that the WFOR-TV tower is available for WTVJ-DT use. However, the current channel 30 DTV allotment for WTVJ-DT has an allocation restriction preventing the use of DTV channel 30 at the WFOR-TV transmitter site. Adjacent channel NTSC station WFLX(TV), channel 29, West Palm Beach, Florida, is predicted to receive interference to an additional 477,736 persons or 12.3 percent of the population of 3,869,360 persons within the WFLX Grade B contour if DTV channel 30 at Miami, Florida, is located at the WFOR-TV tower.

NBC therefore requests that the DTV Table of Allotments in Section 73.622 of the FCC Rules be amended to reflect the substitution of DTV channel 31 for the existing DTV channel 30 allotment at Miami, Florida. Furthermore, that the same reference ERP, HAAT and geographic reference coordinates specified for the current DTV channel 30 allotment at

Miami, Florida be employed for the DTV channel 31 at Miami, Florida.[2] The allotment of DTV channel 31 at Miami. Florida. will permit NBC to locate WTVJ-DT on the WFOR-TV tower, provide improved DTV signal strength levels within the Miami. Florida, DMA urbanized areas, and reduce overall interference to other NTSC and DTV stations.

ALLOCATION CONTRAINTS

The requested substitution of DTV channel 31 for DTV channel 30 at Miami, Florida, complies fully with the *de minimis* interference criteria of Section 73.623(c)(2) of the FCC Rules. An analysis of the existing DTV channel 30 and proposed DTV channel 31 allotments with respect to existing NTSC and DTV allotments and assignments was conducted employing the methodology described in FCC Office of Engineering Technology (OET) Bulletin No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference,* and the FCC Fortran Longley-Rice (FLR) computer program. Figure 2 of this Engineering Exhibit is a tabulation of the predicted service

[2] The current DTV channel 30 allotment at Miami, Florida, specifies ERP of 1000 kilowatts and antenna radiation center HAAT of 549 meters at the reference coordinates 25° 32' 24" North Latitude, 80° 28' 07" West Longitude, referenced to the 1927 North American Datum.

and interference populations and areas for NTSC and DTV stations potentially affected by the proposed channel substitution.

Overall, the proposed substitution of DTV channel 31 for DTV channel 30 at Miami, Florida will reduce predicted interference to a total of 91,497 persons within 1,033 square kilometers. The greatest reduction in predicted interference is to 66,490 persons within 55.9 square kilometers of the Grade B contour of NTSC station WFLX, channel 29, West Palm Beach, Florida. Additionally, the NTSC operation of WGCU, channel 30, Fort Myers, Florida, is predicted to receive interference to 25,007 fewer persons within 977 square kilometers as a result of the proposed channel substitution.

New interference is predicted to a total of 18,644 persons within 532 square kilometers. Most of the new interference, 18,465 persons within 184.4 square kilometers, is predicted to be caused to the adjacent channel DTV operation of WBFS, channel 32, Miami, Florida. However, this interference represents only 0.5 percent of the total population of 3,748,056 persons within the assumed WBFS-DT noise-limited contour based on the

allotment reference ERP and HAAT for DTV channel 32 at Miami, Florida. Assuming that the WBFS-DT operation is located at the FCC reference coordinates for DTV channel 32 at Miami, Florida, virtually all of the new predicted interference to WBFS-DT will be eliminated once the WTVJ-DT operation at the WFOR-TV tower is authorized.

The only other station predicted to receive interference as a result of the proposed channel substitution is the DTV operation of WGCU, channel 31, Fort Myers, Florida. New interference is predicted to 179 persons within 347.2 square kilometers. This represents 0.03 percent of the total population of 651,221 persons within the assumed WGCU-DT noise-limited contour based on the allotment reference ERP and HAAT for DTV channel 31 at Fort Myers, Florida.

PRINCIPAL COMMUNITY COVERAGE

The proposed substitution of DTV channel 31 for DTV channel 30 at Miami, Florida, complies with the principal community coverage requirements of Section 73.625(a) of the FCC Rules. The DTV coverage contour for the proposed DTV channel 31 allotment at Miami, Florida, is the

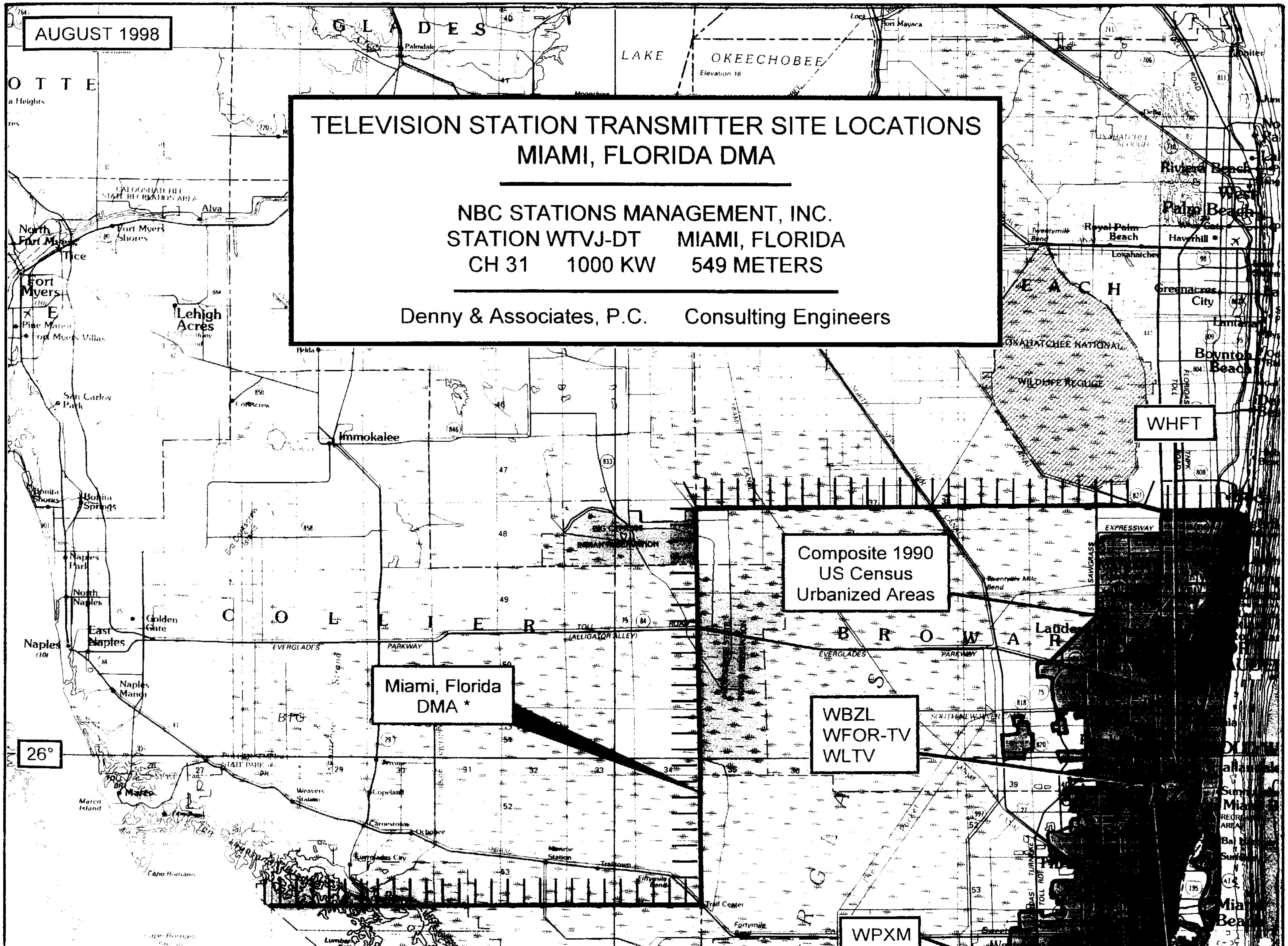
41 dBμ F(50,90) contour. Figure 3 of this Engineering Exhibit is a portion of the USGS Florida map from the National Atlas, 1:2,000,000 scale map series showing that all of Miami, Florida, lies well within the predicted DTV channel 31 coverage (41 dBμ F(50,90)) contour.

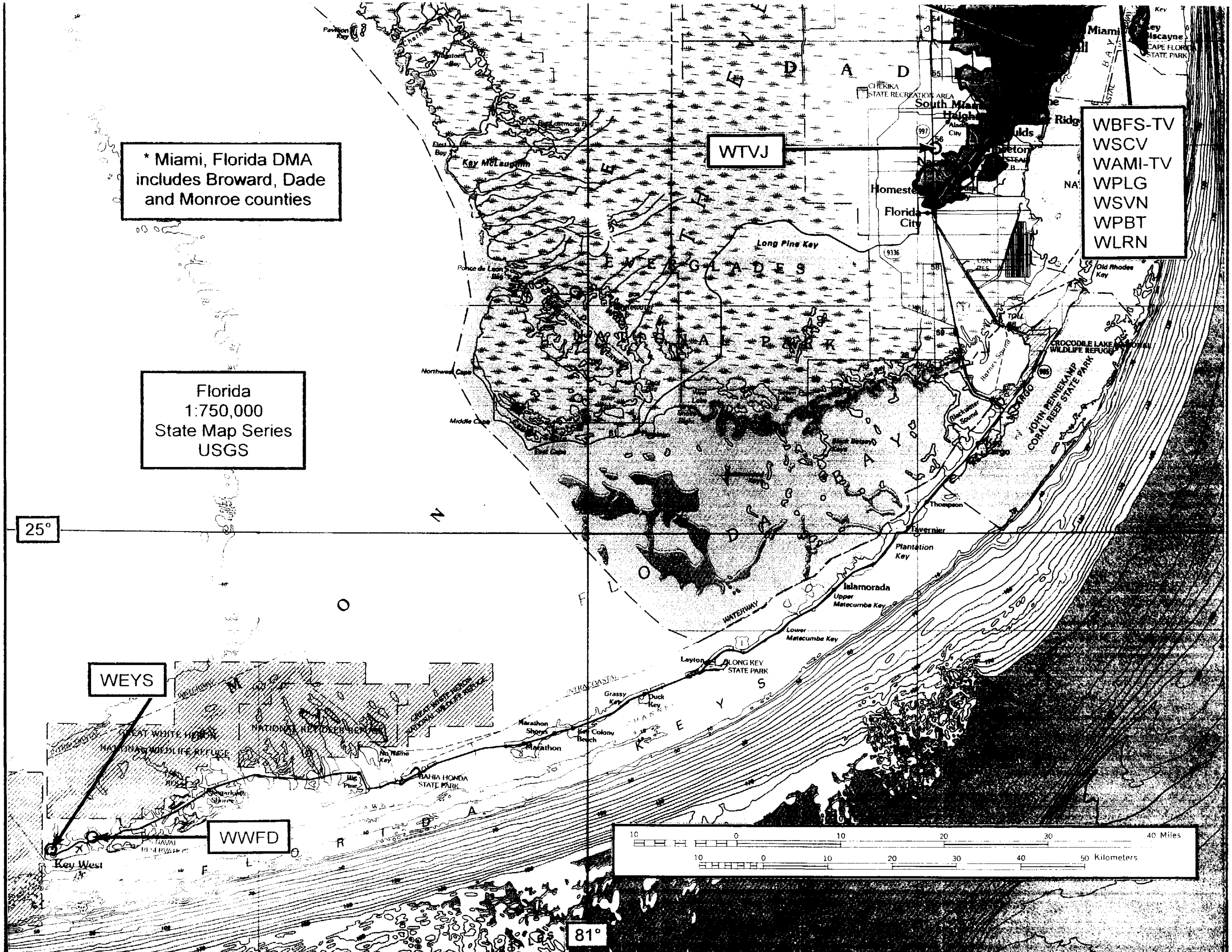
CONCLUSIONS

The substitution of DTV channel 31 for DTV channel 30 at Miami, Florida, can be made in full conformance with FCC Rules. The requested channel change will result in an overall reduction in interference to other NTSC and DTV stations. NBC's plans to locate WTVJ-DT on the WFOR-TV tower will further reduce predicted interference, increase WTVJ-DT predicted signal strength within the Miami, Florida, DMA, and reduce the dependency of WTVJ-DT on translator stations, thus improving spectrum efficiency.

Alan R. Rosner, P.E.

August 7, 1998


AUGUST 1998
TELEVISION STATION TRANSMITTER SITE LOCATIONS
MIAMI, FLORIDA DMA
NBC STATIONS MANAGEMENT, INC.
STATION WTVJ-DT MIAMI, FLORIDA
CH 31 1000 KW 549 METERS
Denny & Associates, P.C. Consulting Engineers
WHFT
Composite 1990
US Census
Urbanized Areas
Miami, Florida
DMA *
WBZL
WFOR-TV
WLTV
WPXM
26°
LAKE OKEECHOBEE
GLADES
COLLIER
BROWARD
Naples
Immokalee
Lehigh Acres
Fort Myers
Alva
EVERGLADES PARKWAY
Royal Palm Beach
Boynton Beach
Greenacres City



* Miami, Florida DMA
includes Broward, Dade
and Monroe counties
Florida
1:750,000
State Map Series
USGS
WTVJ
WBFS-TV
WSCV
WAMI-TV
WPLG
WSVN
WPBT
WLRN
WEYS
WWFD
25°
81°
Key West
Homestead
Florida City
Long Pine Key
EVERGLADES
NATIONAL PARK
Islamorada
Plantation Key
Tavernier
LONG KEY STATE PARK
Marathon
BAHIA HONDA STATE PARK
GREAT WHITE HERON NATIONAL WILDLIFE REFUGE
CROCODILE LAKE NATIONAL WILDLIFE REFUGE
JOHN PENNEKAMP CORAL REEF STATE PARK
CHEKIKA STATE RECREATION AREA
40 Miles
50 Kilometers

Figure 1

ENGINEERING EXHIBIT
IN SUPPORT OF A PETITION FOR
RULE MAKING TO MODIFY
THE DTV TABLE OF ALLOTMENTS
STATION WTVJ-DT MIAMI, FLORIDA
NBC STATIONS MANAGEMENT, INC.

DTV INTERFERENCE STUDY

Station	Channel 30, Miami, FL FCC Reference Allotment Population (1990 Census)	Area (Sq. km)	Proposed Channel 31 Miami, FL Allotment Population (1990 Census)	Area (Sq. km)	Population Change	Area Change
WGCU, Ch. 30z, Fort Myers, FL						
Within FCC Grade B Contour	651,221	16,321.4	651,221	16,321.4	0	0.0
Within Longley-Rice Grade B Contour	651,221	16,321.4	651,221	16,321.4	0	0.0
NTSC Interference	718	133.2	718	133.2	0	0.0
Additional Interference From DTV	27,465	1,061.7	2,458	84.8	-25,007	976.9
Total Interference	28,183	1,194.9	3,176	218.0	-25,007	976.9
WTVX, Ch. 34z, Fort Pierce, FL						
Within FCC Grade B Contour	1,375,867	24,332.3	1,375,867	24,332.3	0	0.0
Within Longley-Rice Grade B Contour	1,375,867	24,332.3	1,375,867	24,332.3	0	0.0
NTSC Interference	308,087	1,014.5	308,087	1,014.5	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	308,087	1,014.5	308,087	1,014.5	0	0.0
WEYS, Ch. 22+ , Key West, FL						
Within FCC Grade B Contour	32,979	1,740.6	32,979	1,740.6	0	0.0
Within Longley-Rice Grade B Contour	32,979	1,740.6	32,979	1,740.6	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0

Station	Channel 30, Miami, FL FCC Reference Allotment Population (1990 Census)	Area (Sq. km)	Proposed Channel 31 Miami, FL Allotment Population (1990 Census)	Area (Sq. km)	Population Change	Area Change
WWWB, Ch. 32z, Lakeland, FL						
Within FCC Grade B Contour	2,428,627	17,464.5	2,428,627	17,464.5	0	0.0
Within Longley-Rice Grade B Contour	2,428,627	17,464.5	2,428,627	17,464.5	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0
WLTV, Ch. 23-, Miami, FL						
Within FCC Grade B Contour	3,794,393	15,912.5	3,794,393	15,912.5	0	0.0
Within Longley-Rice Grade B Contour	3,794,393	15,912.5	3,794,393	15,912.5	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0
WBFS-TV, Ch. 33z, Miami, FL						
Within FCC Grade B Contour	3,748,056	17,636.0	3,748,056	17,636.0	0	0.0
Within Longley-Rice Grade B Contour	3,748,056	17,636.0	3,748,056	17,636.0	0	0.0
NTSC Interference	149,682	376.9	149,682	376.9	0	0.0
Additional Interference From DTV	675	4.0	675	4.0	0	0.0
Total Interference	150,357	380.9	150,357	380.9	0	0.0
WPXM, Ch. 35z, Miami, FL						
Within FCC Grade B Contour	2,889,970	8,061.0	288,9970	8,061.0	0	0.0
Within Longley-Rice Grade B Contour	2,889,970	8,061.0	288,9970	8,061.0	0	0.0
NTSC Interference	593,509	622.9	593,509	622.9	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	593,509	622.9	593,509	622.9	0	0.0
WBZL, Ch. 39z, Miami, FL						
Within FCC Grade B Contour	3,725,022	14,982.1	3,725,022	14,982.1	0	0.0
Within Longley-Rice Grade B Contour	3,725,022	14,982.1	3,725,022	14,982.1	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0

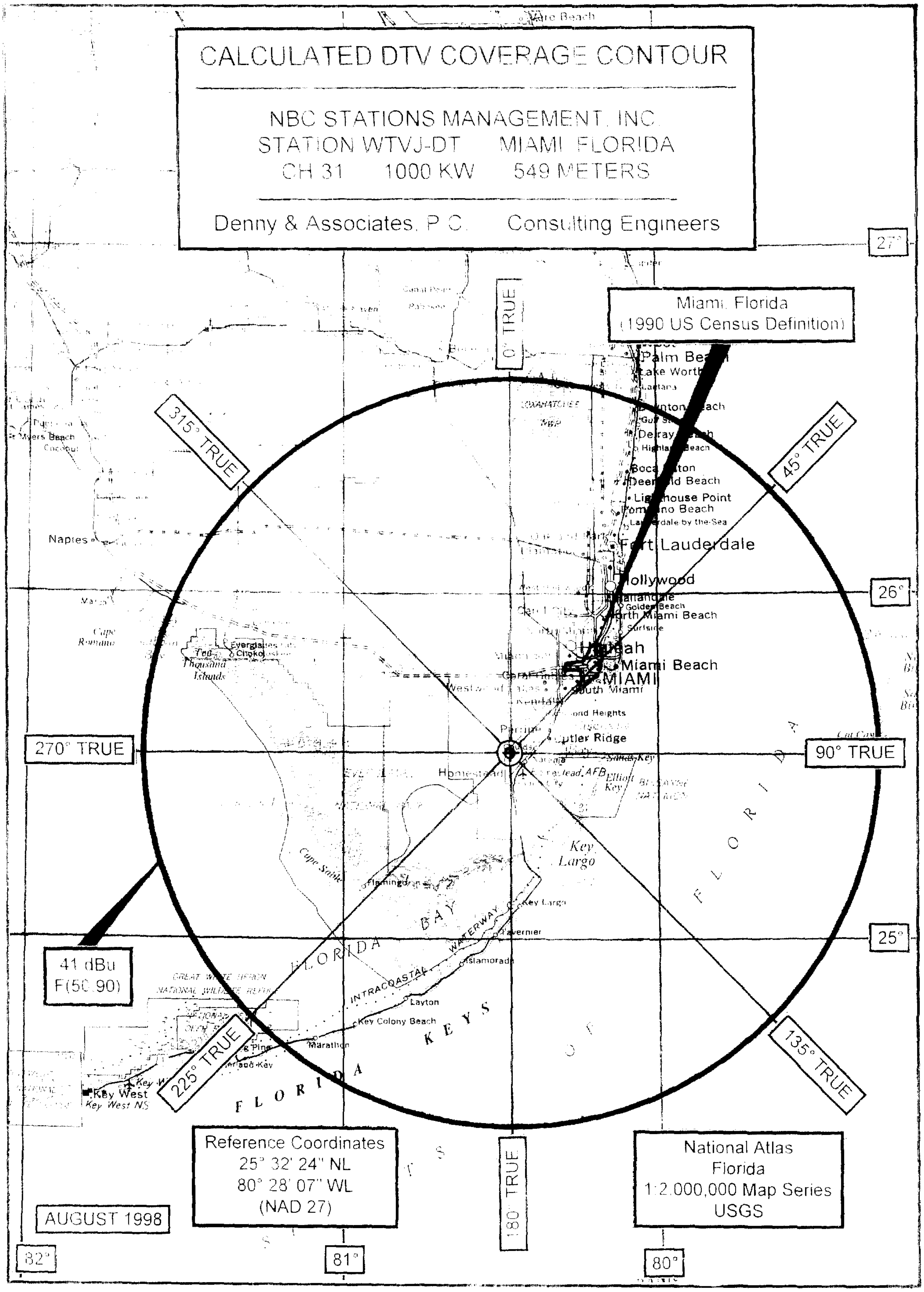
Station	Channel 30, Miami, FL FCC Reference Allotment Population (1990 Census)	Area (Sq. km)	Proposed Channel 31 Miami, FL Allotment Population (1990 Census)	Area (Sq. km)	Population Change	Area Change
WHFT, Ch. 45+, Miami, FL						
Within FCC Grade B Contour	3,710,164	12,757.2	3,710,164	12,757.2	0	0.0
Within Longley-Rice Grade B Contour	3,710,164	12,757.2	3,710,164	12,757.2	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0
WZVN-TV, Ch. 26-, Naples, FL						
Within FCC Grade B Contour	624,539	19,537.8	624,539	19,537.8	0	0.0
Within Longley-Rice Grade B Contour	624,539	19,537.8	624,539	19,537.8	0	0.0
NTSC Interference	0	8.0	0	8.0	0	0.0
Additional Interference From DTV	0	4.0	0	4.0	0	0.0
Total Interference	0	12.0	0	12.0	0	0.0
WTVK, Ch. 46z, Naples, FL						
Within FCC Grade B Contour	547,900	14,550.9	547,900	14,550.9	0	0.0
Within Longley-Rice Grade B Contour	547,900	14,550.9	547,900	14,550.9	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0
WTTA, Ch. 38z, St Petersburg, FL						
Within FCC Grade B Contour	2,920,512	21,417.5	2,920,512	21,417.5	0	0.0
Within Longley-Rice Grade B Contour	2,917,921	21,393.5	2,917,921	21,393.5	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	21,273	555.9	21,273	555.9	0	0.0
Total Interference	21,273	555.9	21,273	555.9	0	0.0
WTOG, Ch. 44+, St Petersburg, FL						
Within FCC Grade B Contour	3,123,779	28,343.6	3,123,779	28,343.6	0	0.0
Within Longley-Rice Grade B Contour	3,123,651	28,335.6	3,123,651	28,335.6	0	0.0
NTSC Interference	41,583	1,396.0	41,583	1,396.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
Total Interference	41,583	1,396.0	41,583	1,396.0	0	0.0

DTV Interference Study
WTVJ-DT, Miami, Florida

Station	Channel 30, Miami, FL FCC Reference Allotment Population (1990 Census)	Area (Sq. km)	Proposed Channel 31 Miami, FL Allotment Population (1990 Census)	Area (Sq. km)	Population Change	Area Change
WFTS, Ch. 28z, Tampa, FL						
Within FCC Grade B Contour	3,078,997	27,072.7	3,078,997	27,072.7	0	0.0
Within Longley-Rice Grade B Contour	3,078,649	27,060.7	3,078,649	27,060.7	0	0.0
NTSC Interference	164,836	4,627.4	164,836	4,627.4	0	0.0
Additional Interference From DTV	712	12.0	712	12.0	0	0.0
Total Interference	165,548	4,639.4	165,548	4,639.4	0	0.0
WFLX, Ch. 29+, West Palm Beach, FL						
Within FCC Grade B Contour	3,869,360	24,721.3	3,869,360	24,721.3	0	0.0
Within Longley-Rice Grade B Contour	3,869,360	24,721.3	3,869,360	24,721.3	0	0.0
NTSC Interference	18,900	39.9	18,900	39.9	0	0.0
Additional Interference From DTV	66,490	55.9	0	0.0	-66,490	55.9
Total Interference	85,390	95.8	18,900	39.9	-66,490	55.9
WBCC-DT, Ch. 30, Cocoa, FL						
Within FCC Noise-Limited Contour	1,042,648	13,458.5	1,042,648	13,458.5	0	0.0
Within Longley-Rice Noise-Limited Contour	1,042,648	13,458.5	1,042,648	13,458.5	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
DTV Interference Only	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0
WGCU-DT, Ch. 31, Fort Myers, FL						
Within FCC Noise-Limited Contour	651,221	16,321.4	651,221	16,321.4	0	0.0
Within Longley-Rice Noise-Limited Contour	651,221	16,321.4	651,221	16,321.4	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	179	347.2	179	347.2
DTV Interference Only	0	0.0	179	347.2	179	347.2
Total Interference	0	0.0	179	347.2	179	347.2

Figure 2
Sheet 1 of 5

Station	Channel 30, Miami, FL FCC Reference Allotment Population (1990 Census)	Area (Sq. km)	Proposed Channel 31 Miami, FL Allotment Population (1990 Census)	Area (Sq. km)	Population Change	Area Change
WBFS-DT, Ch. 32, Miami, FL						
Within FCC Noise-Limited Contour	3,748,056	17,636.0	3,748,056	17,636.0	0	0.0
Within Longley-Rice Noise-Limited Contour	3,748,056	17,636.0	3,748,056	17,636.0	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	18,465	184.4	18,465	184.4
DTV Interference Only	0	0.0	18,465	184.4	18,465	184.4
Total Interference	0	0.0	18,465	184.4	18,465	184.4
WFTS-DT, Ch. 29, Tampa, FL						
Within FCC Noise-Limited Contour	3,078,997	27,072.7	3,078,997	27,072.7	0	0.0
Within Longley-Rice Noise-Limited Contour	3,078,997	27,072.7	3,078,997	27,072.7	0	0.0
NTSC Interference	0	0.0	0	0.0	0	0.0
Additional Interference From DTV	0	0.0	0	0.0	0	0.0
DTV Interference Only	0	0.0	0	0.0	0	0.0
Total Interference	0	0.0	0	0.0	0	0.0


CALCULATED DTV COVERAGE CONTOUR
NBC STATIONS MANAGEMENT, INC.
STATION WTVJ-DT MIAMI, FLORIDA
CH 31 1000 KW 549 METERS
Denny & Associates, P.C. Consulting Engineers
Miami, Florida
(1990 US Census Definition)
0° TRUE
45° TRUE
90° TRUE
135° TRUE
180° TRUE
225° TRUE
270° TRUE
315° TRUE
27°
26°
25°
82°
81°
80°
41 dBu
F(50,90)
Reference Coordinates
25° 32' 24" NL
80° 28' 07" WL
(NAD 27)
National Atlas
Florida
1:2,000,000 Map Series
USGS
AUGUST 1998
Palm Beach
Lake Worth
Delray Beach
Boca Raton
Deerfield Beach
Lighthouse Point
Pompano Beach
Fort Lauderdale
Hollywood
North Miami Beach
Hialeah
Miami Beach
MIAMI
South Miami
Cutler Ridge
Homestead
Naples
Key Largo
Flamingo
Tavernier
Islamorada
Layton
Key Colony Beach
Marathon
Key West
FLORIDA BAY
FLORIDA KEYS
INTRACOASTAL WATERWAY